

Part 1 General

1.1 REFERENCES

- .1 Canadian Standards Association (CSA International)
 - .1 CSA B111-1974(R1998), Wire Nails, Spikes and Staples.
 - .2 CAN/CSA-G164-M92(R1998), Hot Dip Galvanizing of Irregularly Shaped Articles.
 - .3 CSA O121-M1978(R1998), Douglas Fir Plywood.
 - .4 CAN/CSA-O141-91(R1999), Softwood Lumber.
- .2 National Lumber Grades Authority (NLGA)
 - .1 Standard Grading Rules for Canadian Lumber 2000.

1.2 SHOP DRAWINGS

- .1 Submit shop drawings in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Indicate details of construction, profiles, jointing, fastening and other related details.
- .3 Indicate materials, thicknesses, finishes and hardware.
- .4 Indicate locations of service outlets, typical and special installation conditions, and connections, attachments, anchorage and location of exposed fastenings.

1.3 SAMPLES

- .1 Submit samples in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit sample of all exposed wood types with representative sample of fasteners and with finish applied.

1.4 DELIVERY, STORAGE, AND HANDLING

- .1 Deliver, handle, store and protect materials of this section in accordance with Section 01 61 00 - Common Product Requirements.
- .2 Protect lumber against dampness and damage during and after delivery.

Part 2 Products

2.1 MATERIALS

- .1 Salvaged/Reclaimed lumber: unless specified otherwise, S4S, moisture content 7 % or less in accordance with following standards:
 - .1 AWMAC custom grade, moisture content as specified.
- .2 Non-salvaged/reclaimed softwood lumber: unless specified otherwise, S4S, moisture content 7 % or less in accordance with following standards:

- .1 AWMAC custom grade, moisture content as specified.
- .3 Non-salvaged/reclaimed hardwood lumber: S4S, moisture content 7 % or less in accordance with following standards:
 - .1 AWMAC custom grade, moisture content as specified.
- .4 Furring, blocking, nailing strips, grounds, rough bucks, cants, curbs, fascia backing and sleepers:
 - .1 S2S is acceptable for all concealed uses.
 - .2 Board sizes: "Standard" or better grade.
 - .3 Dimension sizes: "Standard" light framing or better grade.
 - .4 Post and timbers sizes: "Standard" or better grade.
- .5 Plywood: to AWMAC custom grade.
- .6 Pressure Treated Lumber: unless specified otherwise, green, S4S, moisture content 7 % or less in accordance with following standards:
 - .1 AWMAC custom grade, moisture content as specified.
- .7 Interior mat-formed wood particleboard: to AWMAC custom grade.
- .8 Nails and staples: to CSA B111.
- .9 Bolts: 12.5mm diameter unless indicated otherwise, complete with nuts and washers.
- .10 Wood screws steel plated, type and size to suit application.
- .11 All exposed hardware shall be stainless steel unless indicated otherwise.
- .12 Sealant: in accordance with Section 07 92 00 – Joint Sealers.
- .13 Wood Preservative: surface applied water repellent wood preservative. Colour: clear.

Part 3 Execution

3.1 PREPARATION

- .1 Treat surfaces of material with wood preservative, before installation.
- .2 Apply preservative by dipping, or by brush to completely saturate and maintain wet film on surface for minimum 3 minute soak on lumber and one minute soak on plywood.
- .3 Re-treat surfaces exposed by cutting, trimming or boring with liberal brush application of preservative before installation.
- .4 Treat material as follows :
 - .1 Wood cants, fascia backing, curbs, nailers, sleepers on roof deck.
 - .2 Wood furring for on an outside surface of exterior masonry and concrete walls.
 - .3 Wood sleepers supporting wood subflooring over concrete slabs in contact with ground or fill.
 - .4 Exposed ends of any pre-treated wood.

3.2 INSTALLATION

- .1 Comply with requirements of NBC, supplemented by the following paragraphs.
- .2 Install furring and blocking as required to space-out and support casework, wall and ceiling finishes, facings, fascia, soffit, siding and other work as required.
- .3 Align and plumb faces of furring and blocking to tolerance of 1:600.
- .4 Install rough bucks, nailers and linings to rough openings as required to provide backing for frames and other work.
- .5 Install wood cants, fascia backing, nailers, curbs and other wood supports as required and secure using galvanized steel fasteners.
- .6 Install sleepers as indicated.

3.3 ERECTION

- .1 Frame, anchor, fasten, tie and brace members to provide necessary strength and rigidity.
- .2 Countersink bolts where necessary to provide clearance for other work or as indicated on Drawings.

3.4 SCHEDULES

- .1 Provide electrical equipment backboards for mounting electrical equipment as indicated.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Blocking in wall and roof openings.
- .2 Wood furring and grounds.
- .3 Electrical panel back boards.
- .4 Preservative treatment of wood.

1.2 RELATED SECTIONS

- .2 Section 06 10 10 – Rough Carpentry.
- .2 Section 06 40 13 – Exterior Architectural Woodwork.
- .3 Section 08 11 00 - Metal Doors and Frames.

1.3 REFERENCES

- .1 CSA-O80 Series-08 - Wood Preservation.
- .2 CAN/CSA-O141-05 (R2009) - Softwood Lumber.
- .3 CSA-O151-09 - Canadian Softwood Plywood.
- .4 CSA-O153-M1980 (R2008) - Poplar Plywood.
- .5 CSA-O437-93 (R2006) - OSB and Waferboard.
- .6 NPA A208.1-2009 - Particleboard.
- .7 APA (American Plywood Association) - Grades and Specifications.
- .8 CANPLY (Canadian Plywood Association) - Canadian Plywood Handbook.
- .9 National Lumber Grades Authority (NLGA) - Standard Grading Rules for Canadian Lumber, 2007 Edition.

1.4 QUALITY ASSURANCE

- .1 Lumber Products: Graded and stamped to NLGA requirements.
- .2 Plywood Products: Certified and graded to CANPLY requirements.

Part 2 Products

2.1 MATERIALS

- .1 Lumber: NLGA (Standard Grading Rules for Canadian Lumber).
 - .1 CAN/CSA-O141, softwood, SPF species, Select grade.
 - .2 19% maximum moisture content, pressure preservative treat.
- .2 Douglas Fir Plywood: CSA-O121 (DFP).
- .3 Particleboard: NPA A208.1; sanded.
- .4 Mat-Formed Panelboards: CSA-O437, OSB.

2.2 ACCESSORIES

- .1 Fasteners and Anchors:

- .1 Fasteners: Hot dipped galvanized steel for high humidity and treated wood locations, unfinished steel elsewhere.
- .2 Anchors: Toggle bolt type for anchorage to hollow masonry, expansion shield and lag bolt type for anchorage to solid masonry or concrete, and bolt or ballistic fastener for anchorages to steel, as required.

2.3 FACTORY WOOD TREATMENT

- .1 Wood Preservative (Pressure Treatment): CSA-O80 Series using water borne preservative with 0.25% retainage.
- .2 Wood Preservative (Surface Application): Clear type.

Part 3 Execution

3.1 FRAMING

- .1 Set members level and plumb, in correct position.
- .2 Place horizontal members, crown side up.
- .3 Construct curb members of single pieces.
- .4 Space framing and furring as indicated on Drawings.
- .5 Curb roof openings except where prefabricated curbs are provided. Form corners by alternating lapping side members.
- .6 Coordinate curb installation with installation of decking and support of deck openings and roofing vapour retardant.

3.2 SHEATHING

- .1 Secure sheathing to framing members with ends over firm bearing and staggered.
- .2 Install electrical panel back boards with plywood sheathing material where required. Size the back board as indicated on Electrical Drawings and specifications.

3.3 SITE APPLIED WOOD TREATMENT

- .1 Apply preservative treatment in accordance with manufacturer's written instructions.
- .2 Brush apply two (2) coats of preservative treatment on wood in contact with cementitious materials or roofing and related metal flashings. Treat Site-sawn cuts.
- .3 Allow preservative to dry prior to erecting members.

3.4 DOOR FRAME INSTALLATION

- .1 Install door frames in rough openings square and level.
- .2 For exterior door, install a 300mm (12") wide strip of vapour barrier to window and door frames prior to installation.

3.5 SURFACE-APPLIED WOOD PRESERVATIVE

- .1 Before installation, treat surfaces of material with wood preservative. Apply preservative after materials have been cut and fit to size.
- .2 Apply preservative by dipping, brush, or spray to completely saturate and maintain a wet film on the surface for a minimum of 3 minutes.

- .3 Re treat surfaces exposed by cutting, trimming, or boring with liberal brush application of preservative before installation.
- .4 Touch-up all material as follows:
 - .1 Wood backing, curbs, nailers, sleepers on roof deck or below grade.
 - .2 Blocking for windows and exterior door frames.

END OF SECTION

Part 1 General

1.1 RELATED SECTION

- .1 Section 06 10 00 – Rough Carpentry.

1.2 SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 – Submittal Procedures.
- .2 Twelve inch long piece of shelter cladding materials, showing screw hole fastener with finish applied.
- .3 Twelve inch long piece of bench board, showing example of pre- drilled holes and fastener with finish applied.
- .4 Representative sample of decking showing all connections and finishes.

1.3 SHOP DRAWINGS

- .1 Submit shop drawings including layout, fastener placement and all connections for site furnishings, screens, and toboggan shelter in accordance with Section 01 33 00- Submittal Procedures.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Time delivery and installation of timber materials to avoid extended on-site storage.
- .2 Keep timber and associated material protected during fabrication, delivery, storage, handling and installation.
- .3 Store materials under cover, protected from weather, out of direct sunlight and away from contact with damp or wet surfaces. Provide for air circulation within and around stacks and under temporary coverings. Allow a minimum of 3 days for acclimation in local temperature and humidity conditions.

Part 2 Products

2.1 LUMBER

- .1 SUPPLIED ITEM: Reclaimed wood beams, posts and bench boards: the following salvaged wood beams shall be used as indicated on Drawings. It is the responsibility of the Contractor to familiarize themselves and be prepared to work with the material below:

7 - 19.5”x6.75” by 47' long laminated wood beams

- .2 Shelter exterior cladding: reclaimed fir as indicated on Drawings.

SUBSTITUTION 1: If directed by Contract Administrator, reclaimed fir may be substituted with non reclaimed/non-salvaged Douglas Fir lumber with edge radius removed on visible sides.

- .3 Decking: Pressure treated wood, green. Size and design as indicated on Drawings.

2.2 FASTENERS

- .1 Site Furnishings benches: All nails, rods, screws, bolts and/or other metal components shall be hot dipped galvanized.
- .2 Shelter exterior cladding: All components including, but not limited to, screws shall be stainless steel.
- .3 Decking: all screws, bolts and/or other metal components shall be hot dipped galvanized.
- .4 Nut and Bolt Locker: Loctite Blue and Loctite Red or similar approved.

2.3 WOOD PRESERVATIVE

- .1 All fir lumber shall receive finish treatment of OSMO Clear Oil Wood Finish or approved equal.
- .2 Fresh cuts shall be sealed within 24 hours with latex based endgrain sealant. Colour: clear.

Part 3 Execution

3.1 GENERAL

- .1 Examine the areas and conditions where exterior woodwork is to be installed and notify the Contract Administrator of any conditions that may in any way impact on the correct installation, layout or design intent of the work. Do not proceed with work until unsatisfactorily conditions are corrected to allow for proper installation of the work.

3.2 LUMBER

- .1 Design of members: Member sizes and shapes as shown on Drawings.
- .2 Layout and construction: As shown on Drawings.

3.3 FASTENERS

- .1 Layout and number of holes: As shown on Drawings.
- .2 Apply Loctite Blue to all site furnishings threaded fasteners. After a period of one year, remove and replace with Loctite Red after fasteners have been tightened.

3.4 WOOD PRESERVATIVES

- .1 Fresh cuts shall be sealed within 24 hours with latex based endgrain sealant. Apply clear finish with a paint brush.
- .2 Apply approved finish product after completion of installation.
- .3 Test selected finish product on several sample boards to confirm ability to adhere and dry. Advise Contract Administrator of any problems in adherence or drying capacity. Do not proceed with work until the determination has been made on the appropriateness or inappropriateness of the selected finish product.

3.5 PROTECTION

- .1 Protect completed work from damage resulting from adjacent work.

3.6 ADJUSTING AND MAINTENANCE

- .1 Repair damaged surfaces and finishes after installation and completion of adjacent work. Replace damaged, disfigured or stained boards if repairs are unacceptable to Contract Administrator.
- .2 Tighten any boards that have loosened as a result of shrinkage after a period of one year after installation. Apply Loctite Red to all site furnishings threaded fasteners.

END OF SECTION